

REMARKS

INTRODUCTION

In accordance with the foregoing, claim 8-9 have been amended. No new matter is submitted and reconsideration of the allowability of the pending claims is respectfully requested.

Claims 1-10 are pending and under consideration. Claim 9 has been amended into independent form.

REJECTION UNDER 35 U.S.C. § 101

Claim 8 stands rejected under 35 U.S.C. §101, with the Office Action indicating that claim 8 is directed to non-statutory subject matter. In view of the above amendment to claim 8, and as incorporated into independent claim 9, specifically clarifying that the claimed counting is performed by a counter device and clarifying that the predetermined period is stored in a storage device, withdrawal of this rejection is respectfully requested.

REJECTION UNDER 35 USC §103

Claims 1-10 stand rejected under 35 USC §103(a) as being unpatentable over paragraphs [0003]-[0005] of the Background of the present application (Background), and in view of Miyatake et al., U.S. Patent Publication 2004/0047252, and Kumada, U.S. Patent No. 5,469,220. This rejection is respectfully traversed.

By way of review, and only as an example, independent claim 1 sets forth:

An apparatus that generates a video-reproducing clock signal from a 480p signal that includes a vertical synchronization signal, horizontal synchronization signals, and copy guard signals, the apparatus comprising:

a coast signal generating unit, which generates a plurality of coast signals with pulse widths, each of which covers the different number of copy guard signals on the basis of the present copy guard signal in one frame signal of the 480p signal; and

a clock signal generating unit, which generates horizontal synchronization signals at the same period as that of the horizontal synchronization signals generated in a previous frame, while the corresponding coast signal is being generated.

Here, there must be a plurality of coast signals generated, and each of the pulse widths must cover a different number of copy guard signals.

As explained in paragraph [0006] of the Background of the present application, describing FIG. 1 of the present application: "if the format of the original video signal changes and the format of the copy guard signal 103 changes, it is impossible to generate an adaptive

clock signal in accordance with the changes, because the coast signal may have a fixed length for 4x9 format of copy guard signals 103."

Accordingly, independent claim 1 claims generating plural coast signals with pulse widths that are based on covering the "different" number of copy guard signals.

See FIGS. 5A-5D of the present application, which illustrates four different coast signals, with each respective pulse width covering a different number of copy guard signals.

As shown in FIGS. 5A-5D, since the coast signal windows may also cover horizontal synchronization signals of the current frame, independent claim 1 further requires the generation of the "horizontal synchronization signals at the same period as that of the horizontal synchronization signals generated in a previous frame, while the corresponding coast signal is being generated."

Here, it is lastly noted that the Office Action has relied upon the particular meanings of the copy guard signals and coast signals set forth in paragraphs [0003]-[0005] of the present application.

Thus, in relying upon additional references, the terms "coast signal" and "copy guard signal" cannot be interpreted differently from the Office Action relied upon paragraphs [0003]-[0005] of the present application, i.e., any teaching or suggestion by either of Miyatake et al. or Kumada must teach or suggest to modify the particular coast signals and copy guard signals set forth in paragraphs [0003]-[0005] of the present application

The Office Action first relies upon Kumada to demonstrate or suggest a generation of "a coast signal generating unit (a first and second window circuits) which generates a plurality of coast signals with pulse width (window signal 1 and window signal 2 are generated with first and second pulse widths), see abstract, col. 20 lines 3-29, figures 4-7 and 17 where the prior art shows a plurality of window signals)." The Office Action further states that it would have been obvious to modify Background by providing plural coast signals with pulse width in order to stably operate the reproducing device.

Further, the Office Action relies upon Miyatake et al. to demonstrate or suggest the generation of plural coast signals with different pulse widths based on the different number of copy guard signals, stating: "Miyatake teaches window generators and window signals (see unit 216, 218, 219 in figure 1, paragraphs 0292, 0332, and 0342). Miyatake further teaches releasing copy guard in the case when all the output signals are not more than a constant threshold value (see paragraph 0191-0197 and claims 25 and 28)." The Office Action further states that it would

have been obvious to modify the combination of Background and Kumada "by providing window signal with different copy guard signal in order to protect the signals from illegal copying."

However, first with regard to Kumada, it is noted that the windows of Kumada have no relevance to copy guard signals, and rather, are particularly disclosed as helping to generate the synthesize the vertical synchronization signal,

As described in col. 1, lines 12-27, of Kumada, the vertical synchronization signal can be synthesized by a vertical sync circuit of count-down type in order to stabilize the vertical scanning operation. "For this purpose, a clock signal NfH having a frequency N times (N : a natural number of 2 or more) the frequency fH of the horizontal sync signal extracted from the input TV composite signal through a sync separator is produced. This clock signal NfH is frequency-divided by a frequency divider in synchronism with the vertical sync signal. A frequency-divided signal having a frequency equal to the vertical sync is thus generated as a count-down vertical sync signal, and is applied to a vertical deflection circuit for vertical scanning." See FIG. 18 of 18 of Kumada.

Accordingly, the system of Kumada is directed toward synthesizing a vertical synchronization signal by performing frequency division operations from the horizontal synchronization signal. Kumada however notes that there may be phase problems between vertical synchronization signals between frames, e.g., during a slow-mode, search mode, pause, etc., of a to be displayed video signal.

To address this out-of-phase issue, Kumada sets forth using two discriminators, each for differently reviewing the potential phase imbalance, with the outputting switching circuit 19 choosing one of two different sync signals to be provided to the vertical deflection circuit.

The different window pulse widths between the first discriminator and the second discriminator are for differently controlling when a counting of a reference clock signal ceases, i.e., the two counting operations may be only different by $32H$. See Kumada in col. 7, line 32, through col. 9, line 7.

Thus, the different "window" operations of Kumada are particularly directed to providing two alternatives for synthesizing a vertical synchronization signal, i.e., an output of only one of the two discriminators is selected for further provision to the vertical deflection circuit. The two windows more particularly control when respective counting of a reference signal ceases, i.e., when to reset corresponding counting flip-flops in each discriminator.

Accordingly, the "window" of Kumada is unrelated to the coast signal of Background. Though two different sized windows are used in Kumada, they are both used at the same time and are used for different purpose than any interpretation of the coast signal of Background. In addition, any reason for implementing the differentiating window system of Kumada would have no relationship to the coast signal of Background.

Therefore, it is respectfully submitted that it would not have been obvious to modify Background in view of Kumada to set forth the claimed generation of different pulse width coast signals. In addition, even if the teaching of Kumada were applied to Background, the combination still would not disclose or suggest the claimed generation of different pulse width coast signals.

With regard to Miyatake et al., there is equally no disclosure or suggestion in Miyatake et al. to generate plural coast signals with different widths, and Miyatake et al. equally fails to disclose or suggest the generating of the plural coast signals with different widths based upon the number of copy guard signals.

Miyatake et al. sets forth an optical disc having one or more spiral tracks, each with a pre-pit area, groove portion, or inter-groove portion for control. The track further has a preformatted data recording area for recording preformatted data, such that the preformatted data recording area has preformatted data formed by means of other than pre-pits. See the Abstract of Miyatake et al.

Again, the Office Action states "Miyatake teaches window generators and window signals (see unit 216, 218, 219 in figure 1, paragraphs 0292, 0332, and 0342). Miyatake further teaches releasing copy guard in the case when all the output signals are not more than a constant threshold value (see paragraph 0191-0197 and claims 25 and 28)."

However, Miyatake beginning in paragraph [0291] is only discussing how an optical pickup would correctly read the data stored on the disc, e.g., through a push-pull signal from photo-detectors 203 and 204. Further, paragraphs [0332]-[0342] are discussing generating "windows", but these windows are applied to outputs of detectors for detecting particular physical aspects of the disc surface, such as the start pit detector 210, for example, which was provided a binarization of one of the difference signals.

These sections of Miyatake are not discussing any windowing that is related to the coast signal of Background, but rather are discussing the applying of different windows to a binarized difference push-pull signal of an optical pickup system for detecting different surface aspects/information from a disc.

Equally, paragraphs [0191]-[0197] of Miyatake are only describing a copyright feature of the underlying disc of Miyatake, where a copy-guard for the respective disc or information of the disc can be released. The "copy-guard" of Miyatake is particularly directed toward a copy protection feature of a disc, which is unrelated to the different copy guard signal of Background.

Here, it is again noted that the teachings of Kumada and Miyatake must be with regard to the particular copy guard signals of Background and the coast signal of Background. Thus, though Kumada sets forth using a "window" feature, that feature is unrelated to the coast signal of Background. Equally, though Miyatake may use the term "copy-guard", the copy guard of Miyatake is term used to refer to whether the underlying disc can be copied, and is unrelated to the copy guard signals described in Background.

In addition to the above, it is noted that independent claim 5 further requires "a counter, that counts falling edges of signals generated after the vertical synchronization signal included in the 480p signal... a coast signal generating unit that generates n coast signals with n different pulse widths on the basis of the count values of the counter." Newly independent claim 9 equally requires such plural coast signals with different pulse widths.

Further, independent claim 8 still further requires: "counting, using a counter device, falling edges of signals generated after the vertical synchronization signal included in the 480p signal... generating a plurality of coast signals on the basis of the counted number of falling edges of a counter."

In addition, claim 8 further requires: "a clock signal generating unit that generates the horizontal synchronization signals with the period according to the information stored in the storing unit and generates a clock signal using the generated horizontal synchronization signals, while the coast signal is being generated, and that generates the clock signal using horizontal synchronization signals included in the 480p signal while the coast signal is not being generated."

It is respectfully submitted that none of Background, Kumada, and/or Miyatake disclose or suggest all the claimed features of the independent claims. It is further respectfully submitted that the dependent claims are equally allowable for their respective features and dependencies from allowable base claims.

Therefore, for at least the above, withdrawal of this rejections is respectfully requested.

CONCLUSION

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

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